

34. (Amended) The method of claim 33 wherein forming said lamination includes forming a third tooth integral with said lamination to define another slot between said second tooth and said third tooth to receive said stator winding.

38. (Amended) The method of claim 32 wherein the tie is arranged around a portion of an inner circumference of the binding ring and a portion of an outer perimeter of the lamination.

#### **REMARKS**

Reconsideration and allowance of this application are respectfully requested. Currently, claims 1-7, 13-18 and 24-38 are pending in this application.

Attached hereto is a marked-up version of the changes made to the claims by the current Amendment. The attached is captioned "**Version With Markings to Show Changes Made.**"

#### **Rejections Under 35 U.S.C. §103:**

Claims 1-4, 7, 24-27 and 30-31 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Scott (U.S. '392) in view of Druss, deceased et al (U.S. '106, hereinafter "Druss"). Applicant respectfully traverses this rejection.

In order to establish a prima facie case of obviousness, all of the claimed limitations must be taught or suggested by the prior art and there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

Applicant submits that the combination of Scott and Druss fails to teach or suggest all of the claimed limitations. For example, Applicant submits that the combination fails to teach or suggest "a tie coupled to said lamination and said binding ring to enable said stator winding to be held within said slot," as required by independent claims 1 and 24 and their respective dependents.

The Office Action alleges "Scott clearly teaches...a binding ring (714); a lamination (col. 7, lines 55-59) coupled to said binding ring, and a tie (11) coupled to said lamination and said binding ring...(emphasis added)."

Applicant respectfully disagrees with this allegation. There is no element in Scott's drawings that is labeled with the reference number "11". There is also no mention of any element having reference number "11" in the written specification. The written specification also lacks any explicit mention of the word "tie." Accordingly, Applicant respectfully submits that Scott fails to teach the claimed "tie", let alone the tie being coupled to a lamination and a binding ring. Indeed, Applicant can see no structure disclosed in Scott coupled to the alleged "binding ring (714)" which could possibly teach the claimed tie.

While Druss discloses a stator lamination 4 (see Fig. 8 of Druss), Druss fails to further disclose a tie coupled to the lamination 4. Druss therefore fails

to remedy the above deficiencies of Scott. If the teachings of Scott and Druss were therefore combined as proposed by the Office Action, the combination would not have taught or suggested all of the claimed limitations.

Applicant further submits that the combination of Scott and Druss fails to disclose a stator winding support structure comprising, inter alia, a binding ring. As noted above, the Office Action alleges that element "714" forms the claimed binding ring. While Scott does indeed disclose "an inner damper shorting ring 714" (see col. 7, lines 49-51), ring 714 is a component of a rotor section. For example, Scott explicitly states "Referring now to FIG. 7, an improved interior rotor section 312 as is preferably used in the machine of the present invention is shown in detail." (See col. 7, lines 33-35). Ring 714, which is illustrated in Fig. 7, is therefore clearly a component of rotor section 312, not a part of a stator winding support structure. Druss fails to remedy this deficiency of Scott.

Since ring 714 is a component of rotor section 312, the laminations coupled to ring 714 are also a part of the rotor section 312. That is, the "microlaminations" discussed in the passage (col. 7, lines 55-59) noted by the Office Action is directed to components of rotor section 312. In marked contrast, laminations 4 illustrated in Fig. 8 of Druss (identified in the Office Action) are directed to laminations of a stator. Applicant thus respectfully submits that one of ordinary skill in the art would not have been motivated to modify those laminations that may be coupled to binding ring 714 of Scott's rotor section 312 in view of laminations 4 of the stator illustrated in Fig. 8 of

Druss. Rotor section 312 disclosed by Scott is different in structure and function from the stator disclosed by Druss. Accordingly, one of ordinary skill in the art would not have been motivated to combine the teachings of Scott and Druss in the manner suggested by the Office Action.

Accordingly, Applicant respectfully submits that claims 1-4, 7, 24-27 and 30-31 are not "obvious" over Scott and Druss and respectfully requests that the rejection of these claims under 35 U.S.C. §103 be withdrawn.

Claims 13-15, 18, 32-34 and 37-38 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Scott in view of Druss, and further in view of Wielt et al (U.S. '867, hereinafter "Wielt"). Applicant respectfully traverses this rejection.

Applicant respectfully submits that the above combination of Scott, Druss and Wielt fails to teach or suggest "coupling said lamination to said binding ring by arranging a tie around a portion of said lamination and a portion of said binding ring to enable said stator winding to be held within said slot," as required by independent claim 13 and its dependents. Independent claim 32 and its dependents require a similar limitation. As discussed above in connection with claims 1 and 13, the combination of Scott and Druss fails to disclose coupling a tie to a lamination and binding ring to enable a stator winding to be held within a slot defined within the lamination and further that one of ordinary skill in the art would not have been motivated to combine the teachings of Druss and Scott in the manner suggested by the Office Action. Applicant submits that Wielt fails to remedy these deficiencies of the

combination of Scott and Druss. Accordingly, Applicant submits that claims 13-15, 18, 32-34 and 37-38 are not "obvious" over Scott, Druss and Wielt and respectfully requests that the rejection of these claims under 35 U.S.C. §103 be withdrawn.

Claims 5-6 and 28-29 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Scott in view of Druss, further in view of Ross (U.S. '893). Claims 5-6 depend from claim 1 and claims 28-29 depend from claim 24. The above comments made with respect to independent claims 1 and 24 over the combination of Scott and Druss therefore apply equally to claims 5-6 and 28-29. Applicant submits that Ross fails to remedy the above deficiencies of the combination of Scott and Druss. Applicant therefore respectfully requests that the rejection of claims 5-6 and 28-29 be withdrawn.

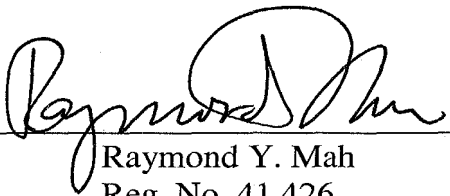
Claims 16-17 and 35-36 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Scott in view of Druss, further in view of Wielt and further in view of Ross. Since claims 16-17 depend from claim 13 and claims 35-36 depend from claim 32, Applicant submits that the above comments with respect to the combination of Scott, Druss and Wielt regarding claim 32 apply equally to claims 16-17 and 35-36, respectively. Ross fails to remedy the above noted deficiencies of the combination of Scott, Druss, and Wielt. Applicant therefore respectfully requests that the rejection of claims 16-17 and 35-36 be withdrawn.

**Conclusion:**

Applicant believes that this entire application is in condition for allowance and respectfully requests a notice to this effect. If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE CLAIMS:**

1. (Amended) A stator winding support structure [for use with a superconducting rotor, said support structure] comprising:
  - a binding ring;
  - a lamination coupled to said binding ring, said lamination having a slot formed therein for receiving a stator winding; and
  - a tie coupled to said lamination and said binding ring to enable said stator winding to be held within said slot.
2. (Amended) The stator winding support structure of claim 1 wherein said tie is arranged around a portion of said lamination and a portion of said binding ring.
3. (Amended) The stator winding support structure of claim 1 wherein said lamination includes a first tooth and a second tooth, said slot being defined between said first tooth and said second tooth, and said first tooth and said second tooth being integral with said lamination.
4. (Amended) The stator winding support structure of claim 3 wherein said lamination includes a third tooth integral with said lamination to define another slot between said second tooth and said third tooth to receive said stator winding.

5. (Amended) The stator winding support structure of claim 1 further comprising a felt ring arranged around an outer circumference of said binding ring so that said felt ring is arranged between said binding ring and said lamination.

6. (Amended) The stator winding support structure of claim 1 further comprising a tire arranged around an outer circumference of said binding ring so that said tire is arranged between said binding ring and said lamination.

7. (Amended) The stator winding support structure of claim 1 further comprising another tie coupled to said binding ring.

13. (Amended) A method of forming a stator winding support structure [for use with a superconducting rotor], the method comprising:  
providing a binding ring;  
forming a slot in a lamination to receive a stator winding; and  
coupling said lamination to said binding ring by arranging a tie around a portion of said lamination and a portion of said binding ring to enable said stator winding to be held within said slot.

15. (Amended) The method of claim 14 wherein forming said lamination includes forming a third tooth integral with said lamination to



define another slot between said second tooth and said third tooth to receive said stator winding.

24. (Amended) A stator [winding support structure] comprising:

a binding ring;

a stator winding;

a lamination coupled to at least a portion of an outer circumference of said binding ring, said lamination having a slot formed therein for receiving [a] the stator winding, the slot being defined between a portion of the outer circumference of the binding ring and a portion of an inner perimeter of the lamination; and

a tie coupled to said lamination and said binding ring to enable said stator winding to be held within said slot.

25. (Amended) The stator [winding support structure] of claim 24 wherein said tie is arranged completely around a portion of said lamination and a portion of said binding ring.

26. (Amended) The stator [winding support structure] of claim 24 wherein said lamination includes a first tooth and a second tooth, said slot being defined between said first tooth and said second tooth, and said first tooth and said second tooth being integral with said lamination.

27. (Amended) The stator [winding support structure] of claim 26 wherein said lamination includes a third tooth integral with said lamination to define another slot between said second tooth and said third tooth to receive said stator winding.

28. (Amended) The stator [winding support structure] of claim 24 further comprising a felt ring arranged around the outer circumference of said binding ring so that said felt ring is arranged between said binding ring and said lamination and between the binding ring and the slot.

29. (Amended) The stator [winding support structure] of claim 24 further comprising a tire arranged around the outer circumference of said binding ring so that said tire is arranged between said binding ring and said lamination and between the binding ring and the slot.

30. (Amended) The stator [winding support structure] of claim 24 further comprising another tie coupled to said binding ring.

31. (Amended) The stator [winding support structure] of claim 30 wherein the tie is arranged around a portion of an inner circumference of the binding ring and a portion of an outer perimeter of the lamination.

32. (Amended) A method of forming a stator [winding support structure], the method comprising:

providing a binding ring and a stator winding;

forming a slot in a lamination to receive a stator winding; and

coupling said lamination to at least a portion of an outer circumference of said binding ring by arranging a tie completely around a portion of said lamination and a portion of said binding ring to enable said stator winding to be held within said slot, the slot being defined between a portion of the outer circumference of the binding ring and a portion of the inner perimeter of the lamination.

34. (Amended) The method of claim 33 wherein forming said lamination includes forming a third tooth integral with said lamination to define another slot between said second tooth and said third tooth to receive said stator winding.

38. (Amended) The [winding support structure] method of claim 32 wherein the tie is arranged around a portion of an inner circumference of the binding ring and a portion of an outer perimeter of the lamination.